

Response
Application No. 10/522,236
Attorney Docket No. 052033

REMARKS

Claims 1-8 and 10 are pending in the application and stand rejected. Claims 1 and 10 are amended. Claim 9 is canceled. No new matter is added. In light of the aforementioned claim amendments and accompanying remarks, Applicant respectfully requests favorable reconsideration.

Priority:

The Examiner states that foreign priority is being claimed under 35 U.S.C. § 119(b), and that a certified copy of the priority document has not been filed. However, Applicant notes that the present application was filed under 35 U.S.C. § 371. That is, the present application was the commencement of the national stage of a PCT application. Thus, no foreign priority under 35 USC §119(b) is being claimed.

Drawings:

The drawings were objected to under 37 CFR §1.84(u)(1) for failing to properly capitalize the view numbers. The drawings were also objected to under 37 CFR §1.84(t) for failing to properly number the sheets of the drawings. FIG. 3 – FIG. 11 were objected to under 37 CFR §1.84(h) for failing to group together and arrange on the sheets without wasting space.

Applicant has amended the drawings to address the objections.

Response
Application No. 10/522,236
Attorney Docket No. 052033

Specification:

The abstract was objected to for being over 150 words. Applicant has amended the abstract to be 150 words.

Claim Objections:

Claims 1-10 were objected to under 37 CFR §1.75(a), as failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention or discovery.

Claim 1, lines 10 and 11 were objected to for grammatical errors. Applicant has amended claim 1 to address the Examiner's objection.

Claim 1, line 11 and claim 10, line 12 recite "and like images." Applicant has amended the claims to address this objection.

Claim 5 was objected to under 35 CFR §1.75(c) as being in improper form. The Examiner contends that claim 5 is a multiple dependent claim which depends on another multiple dependent claim. However, claim 5 was amended in the preliminary amendment filed on January 25, 2005. This amendment made claim 5 only depend from claim 3. As such, claim 5 is not a multiple dependent claim.

Claim 9 was objected to under 37 CFR §1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 9 has been canceled.

Response
Application No. 10/522,236
Attorney Docket No. 052033

Claim Rejections - 35 U.S.C. §101:

Claim 10 was rejected under 35 U.S.C. §101 as being directed toward non-statutory subject matter. Claim 10 has been amended to address this rejection.

Claim Rejections - 35 U.S.C. §103:

Claims 1, 2 and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pingali et al.* (Ball Tracking and Virtual Replays for Innovative Tennis Broadcast, 15th International Conference on Pattern Recognition, 2000, Proceedings, Vol. 4, pg. 152 – 156) in view of *Pizano et al.* (US 6,101,274 A).

Independent Claim 1:

Independent claim 1 requires in part:

¹a score information obtaining section configured to obtain score information indicative of scores of the respective players which vary as the sport match or game proceeds;

²a play event information obtaining section configured to obtain play event information indicative of a characteristic movement of each of the players *from picture information included in the contents*, the picture information containing images of respective of the obstacle and the players, the score information displayed on a screen, and like images; and

³an image substance recognizing section configured to make a comparison between a score information item obtained immediately before a point in time of generation of the play event information and a score information item obtained immediately after the point in time and make reference to a result brought by the play event information, thereby recognizing a substance of an image provided by the play event information.

Response
Application No. 10/522,236
Attorney Docket No. 052033

The Examiner contends these features are largely disclosed by *Pingali*. Regarding element 2 (as labeled above), the Examiner contends it is disclosed in FIG. 1 and FIG. 2. FIG. 1 shows a flowchart where the first decision box is “Trigger received?” The associated paragraphs explaining FIG. 1 go on to state, “Each thread waits for a trigger signal to start frame capture and processing.” “On receiving its trigger, a thread executes a loop of capturing frames from the camera pair....” Section 2.2.

From FIG. 1 and the corresponding description, Applicant respectfully submits that the second element of claim 1 has not been disclosed. *Pingali* discusses a trigger event, but does not mention the italicized part of element 2. That is, nowhere does *Pingali* disclose or fairly suggest that the trigger event comes from picture information.

To the contrary, it seems as though *Pingali* must wait for a trigger input based on something other than picture information; perhaps a human input. Once this happens **then** *Pingali* “executes a loop of capturing frames from the camera pair....” Thus, before the trigger event, *Pingali* does not teach capturing frames. Thus, no picture information can be obtained before the triggering event.

As such, it appears that the triggering event cannot be based on *picture information* as required by claim 1. Thus, Applicant respectfully submits that *Pingali* does not disclose the requirements of claim 1.

Regarding the third element of claim 1, the “image substance recognizing section,” the Examiner contends it is disclosed in section 3.1, on page 154. The Examiner contends that when

Response
Application No. 10/522,236
Attorney Docket No. 052033

Pingali discusses keeping track of a “changing game score,” it discloses an “image substance recognizing section.” However, this does not appear to be what claim 1 requires.

Claim 1 specifically requires an “**image substance** recognizing section.” Keeping track of a changing game score is **not** recognizing the substance of an image. The Examiner must point to how an image is being recognized. Applicant respectfully submits that that this claimed feature is not disclosed or fairly suggested in *Pingali*.

Furthermore, the substance of the image must be “provided by the play event information,” as required by claim 1. The play event information, as indicated above contains picture information. As required in claim 1, this picture information may be in the form of “score information displayed on a screen.” Claim 1 requires the “image substance recognizing section” to recognize an image (i.e. a score), that is displayed on a screen. Nowhere is it apparent that *Pingali* discloses or fairly suggests this feature.

As *Pingali* is not concerned with image recognition, but appears to be dealing with image tracking, there is no reason for *Pingali* to deal with an “image recognition section.” As such, Applicant respectfully submits that the third element of independent claim 1 is not disclosed or fairly suggested by the references.

Dependent Claim 2:

As dependent claim 2 depends from independent claim 1, the arguments presented above regarding claim 1 also apply to claim 2.

Response
Application No. 10/522,236
Attorney Docket No. 052033

Independent Claim 10:

As independent claim 10 contains similar features to those required in independent claim 1, the arguments presented above regarding claim 1 also apply to claim 10.

Dependent Claims 3-9

Claims 3-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pingali et al.* and *Sudhir et al.* (Automatic Classification of Tennis Video for High-Level Content-Based Retrieval, Proceedings of the 1998 International Workshop on Content-Based Access of Image and Video database (CAIVD '98), 1998, pp. 81-90)

As claims 3-9 ultimately depend from independent claim 1, the arguments presented above regarding claim 1, also apply to claims 3-9.

In view of the aforementioned amendments and accompanying remarks, Applicant submits that the claims, as herein amended, are in condition for allowance. Applicant request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney to arrange for an interview to expedite the disposition of this case.

Response

Application No. 10/522,236

Attorney Docket No. 052033

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



Dennis M. Hubbs

Attorney for Applicants

Registration No. 59,145

Telephone: (202) 822-1100

Facsimile: (202) 822-1111

SGA/DMH/klf